

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Kelley et al.	Art Unit	: 2161
Serial No.	: 10/624,085	Examiner	: Charles Edward Lu
Filed	: July 21, 2003	Conf. No.	: 6000
Title	: SYSTEM AND METHOD FOR AN ADAPTIVE USER COMMUNICATIONS DEVICE		

Mail Stop Appeal Brief - Patents

Commissioner for Patents

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BRIEF ON APPEAL

This Brief on Appeal perfects the Notice of Appeal filed June 30, 2008.

(1) Real Party in Interest

This application is currently unassigned, but is under an obligation to assign to Cricket Communications, Inc., who is the real party in interest.

(2) Related Appeals and Interferences

There are no known related appeals and/or interferences.

(3) Status of Claims

Claims 1, 2, 4, 6, 8-12, 14-53, 55-59, 61-64, 66-81, 83-85, 87-101, and 103-105 are pending. Claims 3, 5, 7, 13, 54, 60, 65, 82, 86, and 102 have been canceled. Claims 1, 53, 58, 59, 81, 91, and 103 are the independent claims. Claims 1, 2, 4, 6, 8-12, 14-53, 55-59, 61-64, 66-81, 83-85, 87-101, and 103-105 stand rejected. The rejections of claims 1, 2, 4, 6, 8-12, 14-53, 55-59, 61-64, 66-81, 83-85, 87-101, and 103-105 are appealed.

(4) Status of Amendments

All amendments have been entered.

(5) Summary of Claimed Subject Matter

Claim 1

Claim Language	Support in Specification and/or Figs.
1. A targeting system for adapting a device to a user, the system comprising:	<i>See, e.g.</i> , Abstract, para. [2] (pg. 1, ll. 14–17); para. [6] (pg. 3, ll. 12-21); para. [16] (pg. 6, ll. 12–19) and Fig. 1.
at least one mobile communications device in communication with at least one network;	<i>See, e.g.</i> , para. [6] (pg. 3, ll. 12-21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [16] (pg. 6, ll. 12–19); para. [20] (pg. 10, l. 4 – pg. 11, l. 12) and Fig. 1.
a monitor that detects time and location data associated with the mobile communications device, wherein the detected time and location data represent a current time and a location of the mobile communications device;	<i>See, e.g.</i> , para. [19] (pg. 8, l. 19 – pg. 10, l. 2); para. [20] (pg. 10, l. 4 – pg. 11, l. 12); para. [41] (pg. 31, l. 20-pg. 32, l. 20) and FIGS. 1, 2, and 4.
a virtual database accessible to the at least one mobile communications device over the at least one network, wherein said virtual database comprises:	<i>See, e.g.</i> , Abstract, para. [6] (pg. 3, ll. 12-21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [16] (pg. 6, ll. 12–19); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [19] (pg. 8, l. 19 – pg. 10, l. 2); para. [24] (pg. 15, l. 12 – pg. 16, l. 2); para. [26] (pg. 17, ll. 15–21) and FIGS. 1, 3, and 4.
a user profile including at least one actual user characteristic received over the at least one	<i>See, e.g.</i> , para. [21] (pg. 11, l. 14 – pg. 13, l. 2); para. [34] (pg. 27, ll. 1–9); para. [46] (pg. 36, l.

network;	12 – pg. 37, l. 9) and FIGS. 1, 3, and 4.
a heuristic modeler that generates at least one heuristic user characteristic in accordance with the at least one actual user characteristic, wherein the heuristic user characteristic is stored in the user profile; and	<i>See, e.g.</i> , para. [16] (pg. 6, ll. 12–19); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [21] (pg. 11, l. 14 – pg. 13, l. 2); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [29] (pg. 20, l. 5 – pg. 21, l. 14) and FIGS. 1, 3, and 4.
a search engine that selects content to provide to the at least one mobile communications device over the at least one network, in accordance with said virtual database and the current time and the location of the mobile communications device.	<i>See, e.g.</i> , Abstract, para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [35] (pg. 27, ll. 11–23); para. [44] (pg. 34, l. 18 – pg. 35, l. 18) and FIGS. 1 and 3.

Claim 6

Claim Language	Support in Specification and/or Figs.
6. The targeting system of claim 1, further comprising at least one monitor, wherein said at least one monitor monitors the at least one mobile communications device, wherein said monitor is communicatively connected to said virtual database, and wherein at least one actual user characteristic is varied in accordance with at least one output of said at least one monitor.	<i>See, e.g.</i> , para. [19] (pg. 8, l. 19 – pg. 10, l. 2); para. [20] (pg. 10, l. 4 – pg. 11, l. 12); para. [23] (para. 14, l. 5 – pg. 15, l. 10); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [28] (pg. 19, l. 13 – pg. 20, l. 3); para. [29] (pg. 20, l. 5 – pg. 21, l. 14); para. [31] (pg. 23, l. 1–pg. 24, l. 12); para. [34] (pg. 27, ll. 1–9) and FIG. 1.

Claim 53

Claim Language	Support in Specification and/or Figs.
53. A system for providing a personalized targeted message to a user, the system comprising:	<i>See, e.g.</i> , Abstract, para. [2] (pg. 1, ll. 14–17); para. [6] (pg. 3, ll. 12-21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [16] (pg. 6, ll. 12–19); para. [53] (pg. 42, ll. 6–20); and Fig. 1.
a mobile communications device operated by the user;	<i>See, e.g.</i> , para. [6] (pg. 3, ll. 12-21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [16] (pg. 6, ll. 12–19); para. [21] (pg. 11, l. 14 – pg. 13, l. 2); para. [40] (pg. 31, ll. 1–18) and Fig. 1.
a monitor that detects time and location data associated with the mobile communications device, wherein the detected time and location data represent a current time and a location of the mobile communications device;	<i>See, e.g.</i> , para. [19] (pg. 8, l. 19 – pg. 10, l. 2); para. [20] (pg. 10, l. 4 – pg. 11, l. 12); para. [41] (pg. 31, l. 20-pg. 32, l. 20); and FIGS. 1, 2, and 4.
a virtual database comprising at least one user profile including an actual characteristic about said user and a heuristically determined characteristic about said user, wherein the virtual database also includes one or more items of detected time and location data;	<i>See, e.g.</i> , Abstract, para. [6] (pg. 3, ll. 12-21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [16] (pg. 6, ll. 12–19); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [19] (pg. 8, l. 19 – pg. 10, l. 2); para. [21] (pg. 11, l. 14 – pg. 13, l. 2); para. [24] (pg. 15, l. 12 – pg. 16, l. 2); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [26] (pg. 17, ll. 15–21); para. [29] (pg. 20, l. 5 – pg. 21, l. 14) and FIGS. 1, 3, and 4.
a search engine having access to a plurality of targeted messages and to said virtual database, wherein said search engine filters at least one of the targeted messages that is of interest to the user according to at least one of the actual	<i>See, e.g.</i> , Abstract, para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [8] (pg. 4, ll. 12–19); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [23] (para. 14, l. 5 – pg. 15, l. 10); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [29] (pg. 20, l. 5 – pg. 21, l.

characteristic and the heuristically determined characteristic, and one or more items of detected time and location data; and	14); para. [35] (pg. 27, ll. 11–23); para. [44] (pg. 34, l. 18 – pg. 35, l. 18) and FIGS. 1 and 3.
wherein said search engine communicates the at least one targeted message of interest to said mobile communications device for provision to the user.	<i>See, e.g.</i> , Abstract, para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [29] (pg. 20, l. 5 – pg. 21, l. 14); para. [30] (pg. 21, l. 16 – pg. 22, l. 24); para. [33] (pg. 25, l. 11 – pg. 26, l. 23); para. [41] (pg. 31, l. 20–pg. 32, l. 20); and FIGS. 1 and 3.

Claim 58

Claim Language	Support in Specification and/or Figs.
58. An adaptive wireless communication device network, comprising:	<i>See, e.g.</i> , para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [16] (pg. 6, ll. 12–19); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); and Fig. 1.
a wireless communication device;	<i>See, e.g.</i> , para. [6] (pg. 3, ll. 12–21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [16] (pg. 6, ll. 12–19); para. [21] (pg. 11, l. 14 – pg. 13, l. 2); para. [40] (pg. 31, ll. 1–18) and Fig. 1.
a monitor that detects time and location data corresponding to the wireless communication device, wherein the detected time and location data represent a current time and a current location of the wireless communication device;	<i>See, e.g.</i> , para. [19] (pg. 8, l. 19 – pg. 10, l. 2); para. [20] (pg. 10, l. 4 – pg. 11, l. 12); para. [41] (pg. 31, l. 20–pg. 32, l. 20); and FIGS. 1, 2, and 4.
at least one first database comprising actual information entered by a user of the wireless device;	<i>See, e.g.</i> , para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [21] (pg. 11, l. 14 – pg. 13, l. 2); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [27] (pg. 17, l. 23 – pg. 19, l. 11) and FIGS. 1–4.
at least one second database comprising monitored information of behavior by the user	<i>See, e.g.</i> , para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [19] (pg. 8, l. 19 – pg. 10, l. 2); para. [21]

of the wireless device wherein the at least one second database includes one or more items of detected time and location data;	(pg. 11, l. 14 – pg. 13, l. 2); para. [25] (pg. 16, l. 4– pg. 17, l. 13) and para. [27] (pg. 17, l. 23 – pg. 19, l. 11).
at least one heuristic database comprising heuristically estimated information on user behavior, wherein the heuristically estimated information is estimated in accordance with said at least one first database and said at least one second database; and	<i>See, e.g.</i> , para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [29] (pg. 20, l. 5 – pg. 21, l. 14); para. [31] (pg. 23, l. 1–pg. 24, l. 12); para. [33] (pg. 25, l. 11 – pg. 26, l. 23); para. [34] (pg. 27, ll. 1–9) and para. [44] (pg. 34, l. 18 – pg. 35, l. 18).
a search engine that performs a search in accordance with at least one of said at least one first database, said at least one second database, and said at least one heuristic database, and that returns a result of the search to said wireless device.	<i>See, e.g.</i> , Abstract, para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [8] (pg. 4, ll. 12–19); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [23] (para. 14, l. 5 – pg. 15, l. 10); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [29] (pg. 20, l. 5 – pg. 21, l. 14); para. [30] (pg. 21, l. 16 – pg. 22, l. 24); para. [33] (pg. 25, l. 11 – pg. 26, l. 23); para. [35] (pg. 27, ll. 11–23); para. [41] (pg. 31, l. 20–pg. 32, l. 20); para. [44] (pg. 34, l. 18 – pg. 35, l. 18) and FIGS. 1 and 3.

Claim 59

Claim Language	Support in Specification and/or Figs.
59. A method of targeting content to a user of a communications device, the method comprising:	<i>See, e.g.</i> , Abstract, para. [2] (pg. 1, ll. 14–17); para. [8] (pg. 4, ll. 12–19); para. [9] (pg. 4, l. 21 – pg. 5, l. 2); para. [30] (pg. 21, l. 16 – pg. 22, l. 24); para. [33] (pg. 25, l. 11 – pg. 26, l. 23) and Fig. 4.
monitoring time and location data corresponding to a mobile communications	<i>See, e.g.</i> , para. [19] (pg. 8, l. 19 – pg. 10, l. 2); para. [20] (pg. 10, l. 4 – pg. 11, l. 12); para.

device, wherein the time and location data indicate a current location of the mobile communications device;	[41] (pg. 31, l. 20-pg. 32, l. 20); and FIGS. 1, 2, and 4.
building a virtual database of information regarding the user, wherein the virtual database includes one or more items of time and location data corresponding to the mobile communications device;	<i>See, e.g.</i> , Abstract, para. [6] (pg. 3, ll. 12-21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [16] (pg. 6, ll. 12–19); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [19] (pg. 8, l. 19 – pg. 10, l. 2); para. [21] (pg. 11, l. 14 – pg. 13, l. 2); para. [24] (pg. 15, l. 12 – pg. 16, l. 2); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [26] (pg. 17, ll. 15–21); para. [29] (pg. 20, l. 5 – pg. 21, l. 14) and FIG. 4.
modeling at least one probabilistic behavior of the user in accordance with the virtual database;	<i>See, e.g.</i> , para. [8] (pg. 4, ll. 12–19); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [32] (pg. 24, l. 14 – pg. 25, l. 9); para. [50] (pg. 40, ll. 4–23) and FIG. 4.
searching for content targeted to the at least one modeled probabilistic behavior; and	<i>See, e.g.</i> , Abstract, para. [8] (pg. 4, ll. 12–19); para. [32] (pg. 24, l. 14 – pg. 25, l. 9); para. [33] (pg. 25, l. 11 – pg. 26, l. 23); para. [50] (pg. 40, ll. 4–23); para. [51] (pg. 41, ll. 1–8) and FIG. 5.
providing the content to the communications device.	<i>See, e.g.</i> , Abstract, para. [6] (pg. 3, ll. 12-21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [8] (pg. 4, ll. 12–19); para. [53] (pg. 42, ll. 6–20) and FIG. 5.

Claim 81

Claim Language	Support in Specification and/or Figs.
81. An adaptive message targeting system, the system comprising:	<i>See, e.g.</i> , Abstract, para. [2] (pg. 1, ll. 14–17); para. [6] (pg. 3, ll. 12-21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [16] (pg. 6, ll. 12–19); para. [53] (pg. 42, ll. 6–20) and Fig. 1.
means for monitoring time and location data corresponding to a mobile communications device, wherein the time and location data indicate a current location of the mobile communications device;	<i>See, e.g.</i> , para. [19] (pg. 8, l. 19 – pg. 10, l. 2); para. [20] (pg. 10, l. 4 – pg. 11, l. 12); para. [41] (pg. 31, l. 20-pg. 32, l. 20); and FIGS. 1, 2, and 4.
means for accepting a virtual database of information regarding a mobile communications device user, wherein the virtual database includes one or more items of time and location data corresponding to the mobile communications device;	<i>See, e.g.</i> , Abstract, para. [6] (pg. 3, ll. 12-21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [16] (pg. 6, ll. 12–19); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [19] (pg. 8, l. 19 – pg. 10, l. 2); para. [21] (pg. 11, l. 14 – pg. 13, l. 2); para. [24] (pg. 15, l. 12 – pg. 16, l. 2); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [26] (pg. 17, ll. 15–21); para. [29] (pg. 20, l. 5 – pg. 21, l. 14) and FIGS. 1 and 4.
means for modeling at least one probabilistic behavior of the user, in accordance with the virtual database;	<i>See, e.g.</i> , para. [8] (pg. 4, ll. 12–19); para. [16] (pg. 6, ll. 12–19); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [32] (pg. 24, l. 14 – pg. 25, l. 9); para. [34] (pg. 27, ll. 1–9); para. [50] (pg. 40, ll. 4–23) and FIGS. 1 and 4.
means for selecting content targeted to the at least one modeled probabilistic behavior, wherein the appropriateness of the content is	<i>See, e.g.</i> , Abstract, para. [8] (pg. 4, ll. 12–19); para. [16] (pg. 6, ll. 12–19); para. [20] (pg. 10, l. 4 – pg. 11, l. 12); para. [21] (pg. 11, l. 14 –

determined based on the current location of the mobile communications device; and	pg. 13, l. 2); para. [27] (pg. 17, l. 23 – pg. 19, l. 11); para. [32] (pg. 24, l. 14 – pg. 25, l. 9); para. [33] (pg. 25, l. 11 – pg. 26, l. 23); para. [50] (pg. 40, ll. 4–23); para. [51] (pg. 41, ll. 1–8) and FIG. 5.
means for providing the content to the mobile communications device.	<i>See, e.g.</i> , Abstract, para. [6] (pg. 3, ll. 12-21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [8] (pg. 4, ll. 12–19); para. [16] (pg. 6, ll. 12–19); para. [17] (pg. 6, l. 21 – pg. 7, l. 8); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [53] (pg. 42, ll. 6–20) and FIGS. 1, 2, and 3.

Claim 91

Claim Language	Support in Specification and/or Figs.
91. A virtual database for use in targeting messages to at least one user of a communications device, the virtual database comprising:	<i>See, e.g.</i> , Abstract, para. [6] (pg. 3, ll. 12-21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [8] (pg. 4, ll. 12–19); para. [16] (pg. 6, ll. 12–19); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [21] (pg. 11, l. 14 – pg. 13, l. 2); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [27] (pg. 17, l. 23 – pg. 19, l. 11) and FIGS. 1-5.
at least one network interface to at least one network;	<i>See, e.g.</i> , para. [26] (pg. 17, ll. 15–21); para. [27] (pg. 17, l. 23 – pg. 19, l. 11); para. [28] (pg. 19, l. 13 – pg. 20, l. 3) and FIG. 2.
at least one device interface to at least one mobile communications device;	<i>See, e.g.</i> , para. [26] (pg. 17, ll. 15–21); para. [41] (pg. 31, l. 20-pg. 32, l. 20) and FIG. 2.
a searching interface;	<i>See, e.g.</i> , para. [26] (pg. 17, ll. 15–21); para. [29] (pg. 20, l. 5 – pg. 21, l. 14); para. [30] (pg. 21, l. 16 – pg. 22, l. 24); para. [38] (pg. 29, l. 8

	– pg. 30, l. 3); para. [39] (pg. 30, ll. 5–24); para. [41] (pg. 31, l. 20–pg. 32, l. 20) and FIG. 2.
a storage database comprising at least one actual user characteristic of the at least one user, at least one heuristic user characteristic of the at least one user, and one or more items of time and location data corresponding to the at least one mobile communications device; and	<i>See, e.g.</i> , para. [26] (pg. 17, ll. 15–21); para. [27] (pg. 17, l. 23 – pg. 19, l. 11); para. [29] (pg. 20, l. 5 – pg. 21, l. 14); para. [30] (pg. 21, l. 16 – pg. 22, l. 24); para. [31] (pg. 23, l. 1–pg. 24, l. 12); para. [32] (pg. 24, l. 14 – pg. 25, l. 9); para. [35] (pg. 27, ll. 11–23) and FIG. 2.
a controller communicatively connected to the at least one network interface, the at least one device interface, the searching interface, and the storage database;	<i>See, e.g.</i> , para. [26] (pg. 17, ll. 15–21); para. [27] (pg. 17, l. 23 – pg. 19, l. 11); para. [28] (pg. 19, l. 13 – pg. 20, l. 3); para. [30] (pg. 21, l. 16 – pg. 22, l. 24); para. [31] (pg. 23, l. 1–pg. 24, l. 12); para. [32] (pg. 24, l. 14 – pg. 25, l. 9); para. [39] (pg. 30, ll. 5–24) and FIG. 2.
wherein said controller generates the at least one heuristic user characteristic in accordance with the at least one actual user characteristic and at least one item of time and location data, and wherein said controller generates a search for the searching interface in accordance with the at least one heuristic user characteristic, the at least one actual user characteristic, and at least one of the one or more items of time and location data.	<i>See, e.g.</i> , para. [26] (pg. 17, ll. 15–21); para. [27] (pg. 17, l. 23 – pg. 19, l. 11); para. [28] (pg. 19, l. 13 – pg. 20, l. 3); para. [29] (pg. 20, l. 5 – pg. 21, l. 14); para. [30] (pg. 21, l. 16 – pg. 22, l. 24); para. [31] (pg. 23, l. 1–pg. 24, l. 12); para. [32] (pg. 24, l. 14 – pg. 25, l. 9); para. [33] (pg. 25, l. 11 – pg. 26, l. 23); para. [39] (pg. 30, ll. 5–24); para. [41] (pg. 31, l. 20–pg. 32, l. 20); para. [44] (pg. 34, l. 18 – pg. 35, l. 18) and FIG. 2.

Claim 103

Claim Language	Support in Specification and/or Figs.
103. A search engine for use in targeting messages to at least one user of a wireless communications device, the search engine comprising:	<i>See, e.g.</i> , Abstract, para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [8] (pg. 4, ll. 12–19); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [23] (para. 14, l. 5 – pg. 15, l. 10); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [29] (pg. 20, l. 5 – pg. 21, l. 14); para. [30] (pg. 21, l. 16 – pg. 22, l. 24); para. [33] (pg. 25, l. 11 – pg. 26, l. 23); para. [35] (pg. 27, ll. 11–23); para. [41] (pg. 31, l. 20–pg. 32, l. 20); para. [44] (pg. 34, l. 18 – pg. 35, l. 18) and FIGS. 1 and 3.
a first data bank of user characteristics, wherein said first data bank includes at least one user characteristic entered by the user and at least one user characteristic determined in accordance with a time and location monitor that monitors a current location of the wireless communications device;	<i>See, e.g.</i> , Abstract, para. [6] (pg. 3, ll. 12-21); para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [16] (pg. 6, ll. 12–19); para. [18] (pg. 7, l. 10 – pg. 8, l. 17); para. [19] (pg. 8, l. 19 – pg. 10, l. 2); para. [20] (pg. 10, l. 4 – pg. 11, l. 12); para. [21] (pg. 11, l. 14 – pg. 13, l. 2); para. [24] (pg. 15, l. 12 – pg. 16, l. 2); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [26] (pg. 17, ll. 15–21); para. [29] (pg. 20, l. 5 – pg. 21, l. 14) and FIGS. 1, 3, and 4.
a comparator communicatively connected to said first data bank;	<i>See, e.g.</i> , para. [21] (pg. 11, l. 14 – pg. 13, l. 2); para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [27] (pg. 17, l. 23 – pg. 19, l. 11); para. [30] (pg. 21, l. 16 – pg. 22, l. 24) and FIG. 2.
a second data bank of objective characteristics communicatively connected to said comparator, wherein the objective	<i>See, e.g.</i> , para. [25] (pg. 16, l. 4– pg. 17, l. 13); para. [32] (pg. 24, l. 14 – pg. 25, l. 9); para. [33] (pg. 25, l. 11 – pg. 26, l. 23); para. [49]

characteristics are compared to the user characteristics by said comparator for a probabilistic message target;	(pg. 39, l. 8 – pg. 40, l. 2); para. [52] (pg. 41, l. 10 – pg. 42, l. 4) and para. [53] (pg. 42, ll. 6–20).
an available content data bank including available content;	<i>See, e.g.</i> , para. [43] (pg. 33, l. 7 – pg. 34, l. 16); para. [46] (pg. 36, l. 12 – pg. 37, l. 9); para. [47] (pg. 37, ll. 11–19) and para. [48] (pg. 37, l. 21 – pg. 39, l. 6).
a content filter communicatively connected to said comparator and to said available content data bank, wherein the content filter accesses the available content, and filters the available content in accordance with the probabilistic message target output from said comparator;	<i>See, e.g.</i> , para. [16] (pg. 6, ll. 12–19); para. [46] (pg. 36, l. 12 – pg. 37, l. 9); para. [48] (pg. 37, l. 21 – pg. 39, l. 6) and para. [49] (pg. 39, l. 8 – pg. 40, l. 2).
wherein the filtered available content is displayed to the user on the wireless communications device; and	<i>See, e.g.</i> , Abstract, para. [7] (pg. 3, l. 23 – pg. 4, l. 10); para. [29] (pg. 20, l. 5 – pg. 21, l. 14); para. [30] (pg. 21, l. 16 – pg. 22, l. 24); para. [33] (pg. 25, l. 11 – pg. 26, l. 23); para. [41] (pg. 31, l. 20–pg. 32, l. 20); para. [49] (pg. 39, l. 8 – pg. 40, l. 2) and FIGS. 1 and 3.
a query engine that transmits a message to assess a level of interest of the user in the filtered available content.	<i>See, e.g.</i> , para. [53] (pg. 42, ll. 6–20).

(6) Grounds of Rejection to be Reviewed on Appeal

The following grounds for rejection were presented by the Office in the Final Rejection mailed March 31, 2008:

(1) Claims 1, 2, 4, 6, 8-12, 14-17, 22-25, 27-28, 30-34, 41-53, 55-59, 61-64, 66-81, 83-85, 87-93, and 95-101 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,327,574 to Kramer et al. ("Kramer et al.") in view of U.S. Patent No. 6,363,419 to Martin Jr. et al. ("Martin Jr. et al.").

(2) Claims 103-105 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. in view of Martin Jr. et al., and further in view of U.S. Patent No. 5,855,015 to Shoham ("Shoham").

(7) Argument

Claim Rejections Under 35 U.S.C. §103(a) Based on Kramer et al. in view of Martin Jr. et al.

Claims 1, 2, 4, 6, 8-12, 14-17, 22-25, 27-28, 30-34, 41-53, 55-59, 61-64, 66-81, 83-85, 87-93, and 95-101 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,327,574 to Kramer et al. in view of U.S. Patent No. 6,363,419 to Martin Jr. et al.

Claim 1 and Its Dependent Claims

Claim 1 recites (emphasis added) "...a virtual database accessible to the at least one mobile communications device over the at least one network, wherein said virtual database comprises: a user profile including at least one actual user characteristic received over the at least

one network; a heuristic modeler that generates at least one heuristic user characteristic in accordance with the at least one actual user characteristic, wherein the heuristic user characteristic is stored in the user profile; and....”

The Office (Action of March 31, 2008 at pages 6-7) asserts that Kramer et al. teach (emphasis added)...

at least one actual user characteristic received over the network (at least the facts, col. 20, ll. 65-66, fig. 8, interpretation of user characteristic documents 806 and stored into database 804); and a heuristic a heuristic modeler (at least the mapping and sorting, fig. 8, #810, #816) that generates at least one heuristic user characteristic (at least the attribute vector, cols. 21-32) in accordance with the at least one actual user characteristic, the heuristic user characteristic stored in the user profile (at least the software attribute vector mapping uses data from the facts in the database, fig. 8, col. 21, ll. 1-6);....

Kramer et al. fail to disclose the claimed subject matter.

With respect to the claimed user profile, the Office (*Id.* at pages 2-3) further contends that (emphasis added)...

The user profile is not defined in the claim as requiring only one data source. Therefore, using the broadest reasonable interpretation of the claim language, the claim limitation is met since the information about the user (i.e., the “user profile”) of Kramer is stored both in the database and the attribute vector, and thus collectively interpreted as a user profile.

The Office (Advisory Action of June 6, 2008 at page 2) further asserts that “the claims do not require that the claimed ‘user profile’ be interpreted in the narrower way that Applicant intends.”

The Office incorrectly interprets the claim language and Kramer et al.

Claim 1 recites that the user profile contains both an actual user characteristic and a heuristic user characteristic. In contrast, the Office (*Id.* at pages 6-7) asserts that the database 804 disclosed by Kramer et al. stores at least one actual user characteristic and that the attribute vector 808 disclosed by Kramer et al. represents the at least one heuristic user characteristic. Assuming *arguendo* that the Office's identification of the respective characteristics is correct, which is not conceded, Kramer et al. (Col. 21, lines 51-58) nonetheless teach that the database 804 and attribute vector 808 are separate structures. For example, Kramer et al. state (emphasis added)...

The Illumination Sorter 816 then uses data from three data sources (the database 804 directly, the attribute vector 808, and the Boolean Abstractor 812) to do two things. First, it selects a set of illuminations that match either facts about the consumer in the database 804 or the consumer's attribute vector 808 well enough. Second, the Illumination Sorter 816 sorts the selected illuminations in an order determined via a match score computed from the three data sources.

Kramer et al. do not teach that the separate database 804 and attribute vector 808 are combined to form a user profile. Further, claim 1 recites that the user profile is included in a virtual database. Kramer et al. do not disclose or suggest such an association between the database 804 and the attribute vector 808. Therefore, Kramer et al. do not disclose or suggest a user profile including at least one actual user characteristic received over the at least one network and a heuristic modeler that generates at least one heuristic user characteristic in accordance with the at least one actual user characteristic, wherein the heuristic user characteristic is stored in the user profile, as recited in claim 1.

Further, the proposed combination of Kramer et al. and Martin Jr. et al. fails to disclose or suggest a virtual database comprising the recited user profile that is accessible to the at least

one mobile communications device over the network. The Office (Action of March 31, 2008 at page 6) contends that Kramer et al. teach a virtual database accessible to a communications device over the network. Further, the Office (Advisory Action of June 6, 2008 at page 2) asserts that (emphasis added) “The user profile as defined by the examiner is understood to be ‘accessible’ over the network if at least one part of it is accessible. Here, at least the database is accessible.”

The Office's contentions highlight the erroneous interpretation of the user profile discussed above. Claim 1 recites that the virtual database, which includes the user profile, is accessible over the at least one network. The Office (Action of March 31, 2008 at pages 6-7) asserts that the virtual database, as disclosed by Kramer et al., comprises both the database 804 and the attribute vector 808. However, Kramer et al. do not teach that the attribute vector is accessible over the network. Rather, Kramer et al. (Col. 20, lines 61-66) disclose only that the database 804 can be resident outside of the device. Further, Kramer et al. (Col. 20, line 66 – Col. 21, line 6 and Fig. 8) teach that the mapping subsystem 810 that generates the attribute vector 808 is part of, and thus local to, the computing device 802. Thus, Kramer et al. cannot disclose that the virtual database is accessible over the network.

Moreover, Martin Jr. et al. (Col. 7, lines 60-64) teach that a browser of a wireless device can fetch “idle content” over a wireless network, but do not teach or suggest accessing a virtual database that includes the claimed user profile. Therefore, contrary to the Office's assertion, the proposed combination of Kramer et al. and Martin Jr. et al. fails to disclose or suggest a virtual database that includes the recited user profile and is accessible to the at least one mobile communications device over the at least one network, as recited in claim 1.

For at least these reasons, claim 1 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. Claims 2, 4, 6, 8-12, and 14-52 depend from claim 1 and therefore are allowable for at least the reasons discussed with respect to claim 1.

Claim 6

Claim 6 recites (emphasis added) “The targeting system of claim 1, further comprising at least one monitor, wherein said at least one monitor monitors the at least one mobile communications device, wherein said monitor is communicatively connected to said virtual database, and wherein at least one actual user characteristic is varied in accordance with at least one output of said at least one monitor.”

With respect to claim 6, the Office (Action of March 31, 2008 at page 8) asserts that (emphasis added)...

...Kramer of claim 1 further teaches at least one monitor, wherein said at least one monitor monitors the mobile communications device (e.g., user transactions), wherein said monitor is communicatively coupled to said virtual database (see client and server side components starting from col. 12, l. 1), and wherein at least one actual user characteristic is varied in accordance with at least one output of said at least one monitor (see “updating a consumer model”, col. 24, l. 36).

Kramer et al. fail to disclose the claimed subject matter.

With respect to claim 1, the Office (*Id.* at page 7) concedes that Kramer et al. do not teach a mobile communications device. Therefore, Kramer et al. cannot disclose a monitor that monitors a mobile communications device. The Office (Advisory Action of June 6, 2008 at page 2) now asserts that “the rejection of claim 1 modifies Kramer to support a mobile

communications device.” Nonetheless, Kramer et al. do not disclose a monitor that monitors a mobile communications device.

In fact, the Office asserts that “user transactions” are equivalent to monitoring a mobile communications device. The Office (Advisory Action of June 6, 2008 at page 2) states that transactions satisfy monitoring “because a user’s transactions are monitored by recording the user transactions in some fashion.” Such an interpretation conflicts with the claim language and does not find support in the proposed combination. For example, Kramer et al. (Col. 4, lines 44-47) define a transaction as “an event where some amount of resources or information are exchanged between the consumer and a vendor (or content provider) at some particular time or over some particular time interval.” Monitoring an exchange between a consumer and a vendor is not equivalent to monitoring a mobile communications device. Thus, the Office has failed to show how the proposed combination of Kramer et al. and Martin Jr. et al. discloses at least one monitor, wherein said at least one monitor monitors the mobile communications device, as recited in claim 6.

Because the claimed monitor is not disclosed by the proposed combination, Kramer et al. and Martin Jr. et al. cannot disclose that at least one actual user characteristic is varied in accordance with at least one output of the monitor that monitors the at least one mobile communications device. The Office (Action of March 31, 2008 at pages 3 and 8) asserts that Kramer et al.’s disclosure of updating a consumer model (Col. 24, line 36 – Col. 25, line 39) discloses varying an actual user characteristic. Further, the Office (Advisory Action of June 6, 2008 at page 2) asserts that (emphasis added) “Since the consumer model contains ‘actual’ (as opposed to non-existing) user data and is updated, the limitation of ‘varying the actual user

characteristic' is met.” However, Kramer et al. (Col. 25, lines 1-4 and Col. 27, lines 7-20) teach updating the consumer model in response to transactions that occur at a store. Updating a consumer model based on transactions at a store is not equivalent to varying an actual user characteristic in accordance with output of a monitor that monitors a mobile communications device. Further, Martin Jr. et al. also do not disclose varying an actual user characteristic in accordance with an output of the claimed monitor. Accordingly, the proposed combination of Kramer et al. and Martin Jr. et al. fail to disclose, teach, or suggest the subject matter recited in claim 6.

For at least these reasons, claim 6 also is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. based on its own merits. Claims 8-11 depend from claim 6 and therefore also are allowable for at least the reasons discussed with respect to claim 6.

Claim 53 and Its Dependent Claims

Claim 53 recites (emphasis added) “...a monitor that detects time and location data associated with the mobile communications device, wherein the detected time and location data represent a current time and a location of the mobile communications device; a virtual database comprising at least one user profile including an actual characteristic about said user and a heuristically determined characteristic about said user, wherein the virtual database also includes one or more items of detected time and location data;...”

As discussed above with respect to claim 1, the proposed combination of Kramer et al. and Martin Jr. et al. fails to disclose, teach, or suggest a user profile including an actual characteristic about said user and a heuristically determined characteristic about said user, as also

is recited in claim 53. Rather, Kramer et al. teach that the database 804, which the Office asserts contains an actual user characteristic, and the attribute vector 808, which the Office associates with a heuristic user characteristic, are separate and distinct objects.

Further, the Office (Action of March 31, 2008 at page 19) concedes that Kramer et al. do not disclose a monitor that detects current time and location data associated with a mobile communications device. The Office (*Id.*) also acknowledges that Kramer et al. do not teach a virtual database that includes one or more items of detected time and location data. Nonetheless, the Office (*Id.* at page 4) asserts that Kramer et al. (emphasis added) “suggests storing ‘time’ data from a mobile device.” However, the Office has admitted that Kramer et al. do not disclose a mobile communications device. Moreover, the cited portion of Kramer et al. (Col. 27, lines 8-20) describes using consecutively numbered transactions periods that do not specify any time increment, not time data associated with a mobile communications device. Therefore, Kramer et al. cannot suggest storing time data corresponding to a mobile communications device.

Additionally, Martin Jr. et al. do not disclose a virtual database that includes one or more items of detected time and location data. In fact, Martin Jr. et al. do not disclose storing time and location data associated with the mobile communications device. Rather, Martin Jr. et al. (Col. 11, lines 50-59) disclose that the idle content of the mobile device is updated when the location and/or time information associated with mobile device changes. Martin Jr. et al. (Col. 1, lines 46-52) further teach that the idle content is then displayed when the mobile device is not in use. Thus, the system of Martin Jr. et al. has no reason to store detected time and location data in a database.

For at least these reasons, claim 53 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. Claims 55-57 depend from claim 53 and therefore are allowable for at least the reasons discussed with respect to claim 53.

Further, claim 58 includes subject matter similar to that of claim 53. Therefore, claim 58 is allowable for at least the reasons discussed with respect to claim 53.

Claim 59 and Its Dependent Claims

Claim 59 recites (emphasis added) "...monitoring time and location data corresponding to a mobile communications device, wherein the time and location data indicate a current location of the mobile communications device; building a virtual database of information regarding the user, wherein the virtual database includes one or more items of time and location data corresponding to the mobile communications device; modeling at least one probabilistic behavior of the user in accordance with the virtual database;..."

The Office (Action of March 31, 2008 at page 22) asserts that Kramer et al. teach (emphasis added)...

Modeling at least one probabilistic behavior of the user, in accordance with the virtual database (see for example the section on consumer models and probabilities, col. 24, l. 36 and also the section on col. 22, l. 16, and also see 'mapping and sorting,' fig. 8, #810, attribute vector, cols. 21-32);
Kramer et al. fail to disclose the claimed subject matter.

Claim 59 recites modeling at least one probabilistic behavior of the user in accordance with the virtual database, which includes time and location data corresponding to the mobile communications device. As the Office (*Id.* at page 7) concedes, Kramer et al. do not disclose a

mobile communications device. Thus, Kramer et al. cannot disclose or suggest modeling a probabilistic behavior in accordance with a virtual database that includes time and location data corresponding to a mobile communications device.

Moreover, Kramer et al. do not teach modeling behavior. Rather, Kramer et al. (Col. 22, lines 16-66) teach that an attribute vector can have scalar values representing interests. Kramer et al. (Col. 24, line 36-46) also teach that each element of an attribute vector represents an interest or preference. The Office (Advisory Action of June 6, 2008 at page 2) asserts that (emphasis added) “the user’s interests (e.g., gathered from various transactions while browsing the internet) are understood to be a user’s general behavior.” Kramer et al. do not equate interests and behaviors. To the contrary, Kramer et al. (Col. 3, lines 10-14) teach that actual behavior is used to assess “the consumer's interests, preferences, and demographics.” Further, Kramer et al. do not disclose or suggest modeling a probabilistic behavior.

Martin Jr. et al. also do not disclose or suggest modeling a probabilistic behavior. Rather, Martin Jr. et al. (Col. 6, lines 41-49) disclose displaying on a mobile device idle content supplied by a service provider. Accordingly, the proposed combination fails to disclose or suggest modeling at least one probabilistic behavior of the user in accordance with the virtual database, as recited in claim 59.

For at least these reasons, claim 59 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. Claims 61-64 and 66-80 depend from claim 59 and therefore are allowable based at least on claim 59.

Additionally, claim 81 includes subject matter similar to that of claim 59. Therefore, claim 81 is allowable for at least the reasons discussed with respect to claim 59. Claims 83-85 and 87-90 depend from claim 81 and therefore are allowable based at least on claim 81.

Claim 91 and Its Dependent Claims

Claim 91 recites (emphasis added) "...a storage database comprising at least one actual user characteristic of the at least one user, at least one heuristic user characteristic of the at least one user, and one or more items of time and location data corresponding to the at least one mobile communications device; a controller communicatively connected to the at least one network interface, the at least one device interface, the searching interface, and the storage database; wherein said controller generates the at least one heuristic user characteristic in accordance with the at least one actual user characteristic and at least one item of time and location data, and wherein said controller generates a search for the searching interface in accordance with the at least one heuristic user characteristic, the at least one actual user characteristic, and at least one of the one or more items of time and location data."

As discussed above with respect to claim 53, the proposed combination of Kramer et al. and Martin Jr. et al. do not disclose storing time and location data corresponding to the mobile communications device. Therefore, Kramer et al. and Martin Jr. et al. fail to disclose the claimed subject matter.

The Office (Action of March 31, 2008 at page 31) asserts that Kramer et al. disclose (emphasis added) "a controller (at least a processor controlling the page illuminator and selection engine, fig. 6, col. 17, ll. 40-50)." Figure 6 of Kramer et al. does not show a processor. Further,

contrary to the Office's assertion, Kramer et al. (Col. 17, lines 40-50) also do not disclose a processor. MPEP §2143 requires that the proposed combination of references teach or suggest all the claimed subject matter in order to establish a *prima facie* case of obviousness. The Office has failed to show how the proposed combination discloses the claimed controller. Therefore, the rejection of this claim is legally deficient.

Further, the Office (Action of March 31, 2008 at page 31) asserts that Kramer et al. disclose a controller (emphasis added) "communicatively coupled to the at least one network interface (the communication with the network is seen in col. 12, ll. 1-6)." Kramer et al. (Col. 12, lines 1-6) disclose...

1. Client Side Components The client side of TIC consists of a database which represents the TIC model of the consumer together with methods which populate the database (from document interpretation) and use the model for targeting and personalization of content.

The cited portion of Kramer et al. fails to disclose or suggest a controller, much less a controller communicatively connected to the a network interface. In fact, contrary to the Office's assertion, the cited portion also fails to disclose or suggest communication with a network.

Additionally, the Office (*Id.*) asserts that the attribute vector disclosed by Kramer et al. represents the at least one heuristic user characteristic. However, Kramer et al. (Col. 20, line 66 – Col. 21, line 4) teaches that the mapping subsystem 810 builds and updates the attribute vector. The mapping subsystem 810, as disclosed by Kramer et al., is not communicatively connected to the at least one network interface, the at least one device interface, the searching interface, and the storage database. Therefore, Kramer et al. fail to disclose, teach or suggest the claimed controller.

The Office (Advisory Action of June 6, 2008 at page 2) asserts that (emphasis added) “a computing system or any software component must contain a processor and ‘controller’ to operate.” The Office (*Id.*) further states (emphasis added) “Here, ‘controller’ might read on a software module executed by a processor,...” Additionally, the Office (*Id.*) states (emphasis added) “Since there is a network, there must be a network interface or else communication cannot occur.” The Office fails to clearly identify how the claimed subject matter is disclosed by the proposed combination. Moreover, the Office attempts to separate the claim into discrete elements and to evaluate the elements in isolation, which is expressly prohibited by MPEP § 2146(II)(C). The proposed combination of Kramer et al. and Martin Jr. et al. does not disclose or suggest a virtual database that includes a controller communicatively connected to the at least one network interface, the at least one device interface, the searching interface, and the storage database, as recited in claim 91.

Moreover, Martin Jr. et al. (Col. 5, lines 5-11) disclose a microcontroller, but do not disclose that the microcontroller is communicatively connected to the at least one network interface, the at least one device interface, the searching interface, and the storage database. Accordingly, the proposed combination of Kramer et al. and Martin Jr. et al. fails to disclose, teach, or suggest the controller recited in claim 91.

For at least these reasons, claim 91 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. Claims 92-101 depend from claim 91 and therefore are allowable for at least the reasons discussed with respect to claim 91.

For all of the above reasons, it is respectfully requested that the ground of rejection (1) be overturned.

Claim Rejections Under 35 U.S.C. §103(a) Based on Kramer et al., Martin Jr. et al. and Shoham

Claims 103-105 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. in view of Martin Jr. et al., and further in view of Shoham.

Claim 103 and Its Dependent Claims

Claim 103 recites (emphasis added) "...a first data bank of user characteristics, wherein said first data bank includes at least one user characteristic entered by the user and at least one user characteristic determined in accordance with a time and location monitor that monitors a current location of the wireless communications device;..."

The Office (Action of March 31, 2008 at page 41) concedes that Kramer et al. do not disclose a wireless communication device or determining a user characteristic in accordance with a time and location monitor that monitors the current location of the wireless communications device. Nonetheless, the Office (*Id.*) asserts that Martin Jr. et al. teach (emphasis added)...

A wireless communications device, and a monitor that detects time and location representing the current time and location of the device. Time and location is used to provide even better targeted advertising (col. 11, ll. 48-60).

Further, the Office (Advisory Action of June 6, 2008 at page 2) asserts that (emphasis added) "Kramer must have a data bank to store data." Additionally, the Office (*Id.*) asserts that (emphasis added) "...the combination would store time and location in a first data bank to enhance the targeted advertising." However, claim 103 recites that the first data bank includes at least one user characteristic determined in accordance with a time and location monitor. The proposed combination fails to disclose the claimed subject matter.

Martin Jr. et al. do not disclose a first data bank of user characteristics that includes at least one user characteristic determined in accordance with a time and location monitor. To the contrary, Martin Jr. et al. (Col. 11, lines 48-60) disclose considering, at the time a cellular hand-off occurs, the time and the approximate geographic location of the mobile device for delivering targeted advertisements. The Office (Action of March 31, 2008 at pages 5-6) asserts (emphasis added) “The user’s time and location must be a user characteristic because the time and location of the user is a characteristic of the user.” Assuming *arguendo* that time and location represent a user characteristic, however, Martin Jr. et al. nonetheless do not disclose that the time and location are included in a first data bank of user characteristics, as recited in claim 103. In fact, Martin Jr. et al. do not disclose a data bank of user characteristics.

With respect to the time and location of a mobile device, the Office (Action of March 31, 2008 at page 41) also asserts (emphasis added)...

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kramer, such that the current time and location of a mobile device would be monitored, detected and stored, and the system would additionally use the time and location to provide advertisements.

However, contrary to the Office’s assertion, neither Kramer et al. nor Martin Jr. et al. suggest storing a user characteristic determined in accordance with a time and location monitor.

Moreover, Shoham does not cure the deficiencies of Kramer et al. and Martin Jr. et al. For example, Shoham (Col. 2, lines 39-45) is directed to the retrieval of hyperlinked information resources and hyperlinked information networks, and does not disclose a data bank of user characteristics. Accordingly, the proposed combination fails to disclose or suggest that a first data bank includes at least one user characteristic entered by the user and at least one user

characteristic determined in accordance with a time and location monitor that monitors a current location of the wireless communications device, as recited in claim 103.

For at least these reasons, claim 103 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. in view of Shoham. Claims 104 and 105 depend from claim 103 and therefore are allowable for at least the reasons discussed with respect to claim 103.

For all of the above reasons, it is respectfully requested that the ground of rejection (2) be overturned.

Concluding Comments

In view of the above remarks, claims 1, 2, 4, 6, 8-12, 14-53, 55-59, 61-64, 66-81, 83-85, 87-101, and 103-105 should be in condition for allowance, and it is respectfully requested that the grounds of rejection be overturned. Please apply \$540 for the brief fee, \$490 for a two-month extension of time, and any additional charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: October 30, 2008 _____

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Appendix of Claims

1. A targeting system for adapting a device to a user, the system comprising:
at least one mobile communications device in communication with at least one network;
a monitor that detects time and location data associated with the mobile communications device, wherein the detected time and location data represent a current time and a location of the mobile communications device;
a virtual database accessible to the at least one mobile communications device over the at least one network, wherein said virtual database comprises:
a user profile including at least one actual user characteristic received over the at least one network;
a heuristic modeler that generates at least one heuristic user characteristic in accordance with the at least one actual user characteristic, wherein the heuristic user characteristic is stored in the user profile; and
a search engine that selects content to provide to the at least one mobile communications device over the at least one network, in accordance with said virtual database and the current time and the location of the mobile communications device.
2. The targeting system of claim 1, wherein the at least one network comprises at least one selected from the group consisting of an internet, an intranet, a direct dial-in network, and a wireless network.
3. (Canceled)
4. The targeting system of claim 1, wherein said mobile communications device comprises at least one selected from the group consisting of a cellular telephone, a programmable digital assistant, a short range wireless device, a laptop having a modem, and a web-enabled wireless device.
5. (Canceled)

6. The targeting system of claim 1, further comprising at least one monitor, wherein said at least one monitor monitors the at least one mobile communications device, wherein said monitor is communicatively connected to said virtual database, and wherein at least one actual user characteristic is varied in accordance with at least one output of said at least one monitor.

7. (Canceled)

8. The targeting system of claim 6, wherein said monitor provides at least one actual characteristic comprising at least one selected from the group consisting of time of activity information, and position of activity information, and behavioral pattern information.

9. The targeting system of claim 6, wherein at least two of the at least one actual user characteristic are batched prior to acceptance over the at least one network by said virtual database.

10. The targeting system of claim 6, wherein said at least one monitor records at least one selected from the group consisting of activity on a television, on a telephone monitor, on the at least one network, and on a purchasing point.

11. The targeting system of claim 6, wherein said at least one monitor comprises at least one selected from the group consisting of a database, at least one storage memory, and at least one batching memory.

12. The targeting system of claim 1, wherein the at least one actual user characteristic is received from the user.

13. (Canceled)

14. The targeting system of claim 12, further comprising an access restrictor that restricts access to the at least one user characteristic.

15. The targeting system of claim 1, wherein said virtual database is two-way accessible to said at least one of said at least one mobile communications device over the at least one network.

16. The targeting system of claim 1, wherein said virtual database comprises at least one memory, at least one processor, at least one database, and at least one comparator.

17. The targeting system of claim 1, wherein said virtual database comprises a real-time cache, and wherein at least one of the at least one actual user characteristic is real-time cached in the real-time cache.

18. The targeting system of claim 1, wherein said virtual database comprises at least one inquiry generator, wherein at least one of the at least one actual user characteristic is generated responsively to a response by the user to an inquiry from the at least one inquiry generator.

19. The targeting system of claim 18, wherein the response is permanently stored within said virtual database.

20. The targeting system of claim 18, wherein the response is temporarily stored to form, in conjunction with the at least one heuristic user characteristic, an overall model of the user within said virtual database.

21. The targeting system of claim 18, wherein the inquiry generator comprises a monitor for monitoring the at least one mobile communications device, and wherein the response by the user comprises an activity monitored by the monitor.

22. The targeting system of claim 1, wherein the heuristic modeler comprises at least two interrelated relational databases.

23. The targeting system of claim 1, wherein said virtual database comprises: at least one network interface to the at least one network; a plurality of device interfaces to a plurality of communications devices; a search engine interface to said search engine; a storage database comprising the at least one actual user characteristic and the at least one heuristic user characteristic; and a controller communicatively connected to the at least one network interface, the plurality of device interfaces, the search engine interface, and the storage database.

24. The targeting system of claim 23, wherein the controller controls information passing to the storage database.

25. The targeting system of claim 24, wherein the controller comprises at least one selected from the group consisting of a DSP, a comparator, and a bus controller.

26. The targeting system of claim 24, wherein the controller passes the information to the storage database by at least one selected from the group consisting of text, voice over-IP, and data streaming.

27. The targeting system of claim 1, wherein the at least one actual user characteristic comprises a search request from the user for said search engine.

28. The targeting system of claim 1, wherein said virtual database weights the at least one actual user characteristic and the at least one heuristic user characteristic.

29. The targeting system of claim 28, wherein the at least one actual user characteristic is weighted 80%, and wherein the at least one heuristic user characteristic is weighted 20%.

30. The targeting system of claim 1, wherein the heuristic modeler comprises a plurality of predictive rules in accordance with general behavioral patterns of persons other than the user.

31. The targeting system of claim 30, wherein the general behavioral patterns are directly entered to the heuristic modeler.

32. The targeting system of claim 30, wherein the general behavioral patterns are monitored by the heuristic modeler.

33. The targeting system of claim 30, wherein said virtual database instructs said search engine in accordance with a statistical probability output of the heuristic modeler, in accordance with a comparison of the at least one actual user characteristic and the predictive rules.

34. The targeting system of claim 33, wherein the statistical probability analysis is updated in accordance with a user behavior responsive to the content provided to the user by the search engine.

35. The targeting system of claim 23, wherein said virtual database further comprises an input mode selector.

36. The targeting system of claim 35, wherein the input mode selector is controllable by the user.

37. The targeting system of claim 35, wherein the input mode selector comprises a data input mode.

38. The targeting system of claim 35, wherein the input mode selector comprises a message request mode.

39. The targeting system of claim 35, wherein the input mode selector comprises a search mode.

40. The targeting system of claim 39, wherein the search mode is an automated search mode generated in accordance with the heuristic modeler.

41. The targeting system of claim 1, further comprising a vendor data access in communication with said virtual database.

42. The targeting system of claim 41, wherein said vendor data access comprises a plurality of messages entered by a plurality of vendors.

43. The targeting system of claim 42, wherein said vendor data access is in communication with said search engine, and wherein the content comprises at least one of the plurality of messages.

44. The targeting system of claim 43, wherein said vendor data access comprises at least one selected from the group consisting of a relational database and a hyperlink.

45. The targeting system of claim 43, wherein the content comprises at least two of the plurality of messages, and wherein the at least two messages are prioritized.

46. The targeting system of claim 45, wherein the at least two messages are prioritized in accordance with a fee paid by at least two of the vendors.

47. The targeting system of claim 45, wherein the at least two messages are prioritized in accordance with a probability of success of each of the at least two messages, according to the at least one heuristic user characteristic.

48. The targeting system of claim 43, wherein said vendor data access further comprises at least one of the at least one actual user characteristic and the at least one heuristic user characteristic, and wherein said search engine selects the content in accordance with the at least one of the at least one actual user characteristic and the at least one heuristic user characteristic in said vendor data access.

49. The targeting system of claim 48, wherein said search engine comprises a filter that identifies the content as relevant to at least one of said virtual database and said vendor data access.

50. The targeting system of claim 49, wherein the filter tailors the content to the user in accordance with said virtual database.

51. The targeting system of claim 49, wherein the filter comprises an internet interface, and wherein the internet interface accesses internet information responsive to said virtual database, and wherein the content comprises the accessed internet information.

52. The targeting system of claim 1, further comprising at least one user response monitor, wherein said at least one user response monitor updates said virtual database in accordance with a response of the user to the contents.

53. A system for providing a personalized targeted message to a user, the system comprising:

a mobile communications device operated by the user;

a monitor that detects time and location data associated with the mobile communications device, wherein the detected time and location data represent a current time and a location of the mobile communications device;

a virtual database comprising at least one user profile including an actual characteristic about said user and a heuristically determined characteristic about said user, wherein the virtual database also includes one or more items of detected time and location data;

a search engine having access to a plurality of targeted messages and to said virtual database, wherein said search engine filters at least one of the targeted messages that is of interest to the user according to at least one of the actual characteristic and the heuristically determined characteristic, and one or more items of detected time and location data; and

wherein said search engine communicates the at least one targeted message of interest to said mobile communications device for provision to the user.

54. (Canceled)

55. The system of claim 53, wherein said mobile communications device is selected from the group consisting of a wireless telephone, a web-enabled programmable digital assistant, and a web-enabled personal computer.

56. The system of claim 53, wherein said virtual database comprises an overall model.

57. The system of claim 56, wherein the at least one targeted message comprises at least one vendor advertisement, and wherein the interest assessed according to the at least one characteristic comprises an interest in purchasing from the at least one vendor advertisement.

58. An adaptive wireless communication device network, comprising:
a wireless communication device;
a monitor that detects time and location data corresponding to the wireless communication device, wherein the detected time and location data represent a current time and a current location of the wireless communication device;
at least one first database comprising actual information entered by a user of the wireless device;
at least one second database comprising monitored information of behavior by the user of the wireless device wherein the at least one second database includes one or more items of detected time and location data;

at least one heuristic database comprising heuristically estimated information on user behavior, wherein the heuristically estimated information is estimated in accordance with said at least one first database and said at least one second database; and

a search engine that performs a search in accordance with at least one of said at least one first database, said at least one second database, and said at least one heuristic database, and that returns a result of the search to said wireless device.

59. A method of targeting content to a user of a communications device, the method comprising:

monitoring time and location data corresponding to a mobile communications device, wherein the time and location data indicate a current location of the mobile communications device;

building a virtual database of information regarding the user, wherein the virtual database includes one or more items of time and location data corresponding to the mobile communications device;

modeling at least one probabilistic behavior of the user in accordance with the virtual database;

searching for content targeted to the at least one modeled probabilistic behavior; and providing the content to the communications device.

60. (Canceled)

61. The method of claim 59, wherein said building comprises monitoring a plurality of information input by the user.

62. The method of claim 59, wherein said building comprises monitoring of transactions engaged in by the user.

63. The method of claim 62, wherein said monitoring comprises monitoring for positive responses by the user to the content provided.

64. The method of claim 61, 62, or 63, further comprising updating the virtual database in accordance with said monitoring.

65. (Canceled)

66. The method of claim 59, wherein said building comprises batching the information, and accepting the information subsequent to said batching.

67. The method of claim 59, wherein said building comprises caching the information prior to said modeling.

68. The method of claim 67, wherein said caching comprises caching until said modeling, and deleting upon said modeling.

69. The method of claim 59, further comprising restricting access to the virtual database.

70. The method of claim 59, wherein said modeling comprises comparing the virtual database with general behavioral information.

71. The method of claim 59, further comprising accepting a search request from the user, wherein said searching is further in accordance with the search request.

72. The method of claim 59, further comprising accepting a heuristic search request in accordance with said modeling, wherein said searching is further in accordance with the heuristic search request.

73. The method of claim 72, further comprising limiting said providing of the content to content having a minimum modeled probability.

74. The method of claim 59, wherein said modeling comprises weighting actual data in the virtual database, monitored data in the virtual database, and heuristic data in the virtual database.

75. The method of claim 59, further comprising: receiving at least one vendor instruction; and targeting the content in accordance with the at least one received vendor instruction.

76. The method of claim 59, further comprising prioritizing the content in accordance with said modeling.

77. The method of claim 59, wherein said providing comprises tailoring the content to the user in accordance with the virtual database.

78. The method of claim 59, wherein said providing comprises tailoring the content to the communications device in accordance with the virtual database.

79. The method of claim 59, wherein said modeling comprises assessing transactional habit and personal preference data.

80. The method of claim 59, further comprising receiving feedback on the success of the content with the user, and updating said modeling in accordance with the feedback.

81. An adaptive message targeting system, the system comprising:
means for monitoring time and location data corresponding to a mobile communications device, wherein the time and location data indicate a current location of the mobile communications device;

means for accepting a virtual database of information regarding a mobile communications device user, wherein the virtual database includes one or more items of time and location data corresponding to the mobile communications device;

means for modeling at least one probabilistic behavior of the user, in accordance with the virtual database;

means for selecting content targeted to the at least one modeled probabilistic behavior, wherein the appropriateness of the content is determined based on the current location of the mobile communications device; and

means for providing the content to the mobile communications device.

82. (Canceled)

83. The targeting system of claim 81, wherein said means for accepting comprises means for monitoring a plurality of information input by the user.

84. The targeting system of claim 81, wherein said means for accepting comprises means for monitoring of transactions engaged in by the user.

85. The targeting system of claim 84, wherein said means for monitoring comprises means for monitoring for positive responses by the user to the content provided.

86. (Canceled)

87. The targeting system of claim 81, wherein said means for accepting comprises a real-time cache for the information.

88. The targeting system of claim 81, wherein said means for modeling comprises a database including general behavioral information.

89. The targeting system of claim 81, further comprising: means for targeting the content in accordance with at least one vendor instruction.

90. The targeting system of claim 81, further comprising means for prioritizing the content in accordance with said means for modeling.

91. A virtual database for use in targeting messages to at least one user of a communications device, the virtual database comprising:
at least one network interface to at least one network;
at least one device interface to at least one mobile communications device;
a searching interface;
a storage database comprising at least one actual user characteristic of the at least one user, at least one heuristic user characteristic of the at least one user, and one or more items of time and location data corresponding to the at least one mobile communications device; and
a controller communicatively connected to the at least one network interface, the at least one device interface, the searching interface, and the storage database;
wherein said controller generates the at least one heuristic user characteristic in accordance with the at least one actual user characteristic and at least one item of time and location data, and wherein said controller generates a search for the searching interface in accordance with the at least one heuristic user characteristic, the at least one actual user characteristic, and at least one of the one or more items of time and location data.

92. The virtual database of claim 91, wherein the controller controls information passing to the storage database from at least one of the at least one network interface, the at least one device interface, the searching interface, and the storage database.

93. The virtual database of claim 92, wherein the controller comprises at least one selected from the group consisting of a DSP, a comparator, and a bus controller.

94. The virtual database of claim 92, wherein the controller passes the information to the storage database by at least one selected from the group consisting of text, voice over-IP, and data streaming.

95. The virtual database of claim 91, wherein the at least one actual user characteristic comprises a search request from the user to be performed by said searching interface.

96. The virtual database of claim 91, wherein the at least one heuristic user characteristic comprises a search request from the controller to be performed by said searching interface.

97. The virtual database of claim 91, wherein said controller instructs said searching interface in accordance with a statistical probability output of the at least one heuristic user characteristic, in accordance with a comparison to the at least one actual user characteristic.

98. The virtual database of claim 97, wherein the statistical probability output is updated in accordance with a user behavior responsive to content provided to the user by the searching interface.

99. The virtual database of claim 91, further comprising a plurality of device interfaces, wherein each device interface comprises a device monitoring interface that monitors user behavior on a communications device.

100. The virtual database of claim 99, wherein the user behavior is monitored for a communications device comprising a television.

101. The virtual database of claim 99, wherein the user behavior is monitored for a communications device comprising a computer.

102. (Canceled)

103. A search engine for use in targeting messages to at least one user of a wireless communications device, the search engine comprising:

- a first data bank of user characteristics, wherein said first data bank includes at least one user characteristic entered by the user and at least one user characteristic determined in accordance with a time and location monitor that monitors a current location of the wireless communications device;

- a comparator communicatively connected to said first data bank;

- a second data bank of objective characteristics communicatively connected to said comparator, wherein the objective characteristics are compared to the user characteristics by said comparator for a probabilistic message target;

- an available content data bank including available content;

- a content filter communicatively connected to said comparator and to said available content data bank, wherein the content filter accesses the available content, and filters the available content in accordance with the probabilistic message target output from said comparator;

- wherein the filtered available content is displayed to the user on the wireless communications device; and

- a query engine that transmits a message to assess a level of interest of the user in the filtered available content.

104. The search engine of claim 103, wherein the said available content data bank comprises network content.

105. The search engine of claim 104, wherein the network content comprises internet content.

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Evidence Appendix

None.

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Related Proceedings Appendix

None.